Conclusion-

    My group hypothesized that if a swab were to be rubbed on a desk that has been coughed on, and then cleaned with hand sanitizer, most of the bacteria will be killed because that is what it is made to do, and on the bottle it states that it kills 99.9% of harmful bacteria. We were completely incorrect. In fact, the opposite happened.

    Basically, we tested the effectiveness of certain cleaning products’ ability to kill bacteria, by coughing on a petri dish and and applying the product to that petri dish. We also had a control, which we coughed on and left untouched. We placed both dishes in an incubator, to speed up the growth of bacteria, and checked after a certain period of time. We then compared the area and relationships within the data, using a spreadsheet.

The area in square centimeters  of bacteria on our cleaned petri dish was greater than on our control petri dish. The area of the bacteria on the cleaned petri dish was 120% higher than on our control. This, along with the other hand sanitizer test, is the highest increase in bacteria. The other hand sanitizer test resulted in an increase of 133%, which means the two average at an increase of 126.5%. In contrast, most of the other products had a lesser amount of bacteria than their corresponding controls. The product which was most effective at killing bacteria was the ‘Wet Wipe’, on average eliminating around 99% of bacteria. On average, around 45% of the bacteria was killed by the products.

    Due to the fact that I was not present during testing, I cannot be completely sure of any sources of error. However, I would assume that it could be difficult to maintain consistency of coughs, especially between different people. It could also be difficult to determine how to apply the product to the petri dish. In addition, I feel some people were not accurate in the collection of their data, because it doesn’t seem plausible that two groups who tested the same product had completely different results.